

REMARKS

Summary of Office Action

Claims 71-89 and 96-106 are pending.

Claims 71-89 and 96-106 have been rejected under 35 U.S.C. § 103(a) as being obvious from Petler United States Patent No. 6,081,519 (hereinafter, "Petler") in view of Amit U.S. Patent No. 7,127,734.

Claims 71-89 and 96-106 have been rejected under 35 U.S.C. § 103(a) as being obvious from Bushmitch et al. U.S. Patent No. 6,950,399 (hereinafter, "Bushmitch") in view of Amit.

While the Examiner acknowledges that the subject matter of claims 72, 77, 83, 87, 97, and 102 are not shown or suggested by any of the cited prior art, nevertheless, the Examiner has taken Official Notice that the subject matter of these claims is "well known and expected in the art at the time of the invention."

Summary of Telephone Interview

Applicants express their appreciation to Examiner Decker, and Supervisory Examiner Nguyen for the telephonic interview granted to applicants' undersigned representative on June 30, 2008. At least a portion of the substance of the interview is set forth, and commented on, below.

Summary of Reply to Office Action

Applicants have responded fully to the outstanding rejections. The rejections under 35 U.S.C. § 103 are respectfully traversed.

With respect to the rejections based on Petler and Amit, the Examiner's attention is drawn to commonly-assigned, copending United States Application No. 10/234,358, which claims priority as a continuation-in-part from the instant application, wherein claimed subject matter that is similar to the claimed subject matter of this application is being prosecuted.

Reply to Rejections under 35 U.S.C. § 103
as Unpatentable from Petler in view of Amit

Applicants' invention relates to a home network. The home network includes a coax backbone and a plurality of network modules. Each of the network modules are connected to the coax backbone. The home network also includes a network master module connected to the coax backbone. The master module receives requests from the network modules over the coax backbone. The requests are for bandwidth to transmit bursts to other network modules. **The master module establishes an order of transmission opportunities for the network modules to follow when transmitting bursts to other network modules.**

The master module may transmit an allocation burst over the coax backbone that allocates a transmission opportunity to each of the modules to transmit bursts. The allocation burst may be based on the aforementioned transmission order. Each of the network modules is configured to communicate with each other network module via the coax backbone.

Petler is directed to a system wherein signals are sent from a first device in a home to a Fiber-to-the-Curb (FTTC) terminal which is outside the home. From the FTTC terminal, the signals are routed back to the home where they are received by a second device in the same home. See Petler, Abstract.

Amit is directed to systems and methods that use existing cable TV systems for home networking. The systems and methods set forth in Amit typically include splitters. See, e.g., col. 4, lines 52, and FIGs. 1-3, 6-7, 9, 10, 13, 14, 17, and 20, and the portions of the specification corresponding thereto.

Applicants submit that it is improper to combine Petler and Amit to render obvious the invention as claimed in independent claims 71, 82, and 96. Petler and Amit cannot be combined at least because Petler teaches away from such a combination. "[A] reference that 'teaches away' cannot serve to create a *prima facie* case of obviousness. We agree that this is a useful general rule." *In re Gurley* 27 F.3d 551 (Fed. Cir. 1994).

Specifically, Petler states that while "[t]he coaxial cable in the home could also be used as an interconnect media, but (it) is typically connected to a passive splitter which does not have electrical characteristics appropriate for in-home device-to-device connections." Thus, Petler teaches away from any in-home network that uses the coaxial cable in the home for device-to-device connections. Specifically, Petler teaches away from such an in-home network that incorporates a splitter. Amit shows a network incorporating a splitter throughout the disclosure.

Applicants respectfully submit that the disclosure in Amit also makes the combination set forth in the Office Action improper. Specifically, Amit states that, in a particular embodiment, "each home device addresses the headend, and the headend assigns the carrier frequency and bandwidth to each home network. . . ." See, column 4, lines 9-14. Accordingly, Amit, like Petler, discusses an in-home network that receives bandwidth assignment from a distant headend and not from within the home network itself. It seems further from Amit that the headend is actually providing bandwidth assignment to each and every device within the home network. Applicant believes that Amit never discloses any embodiments wherein the bandwidth assignment is implemented in the home. It is settled law that when the proposed modification or combination of the prior art would change the principle of operation of the prior art invention being modified, then the teachings of the references are not sufficient to render the claims *prima facie* obvious. MPEP 2143.02 (VI).

During the interview, the Examiner pointed out that Amit includes a home network that can operate in a system that is not connected to the CATV plant. See column 15, lines 14-16. The Examiner also stated that Amit includes, under a heading "Nice to have", a discussion of . . . 2. Home Networking (that) might be able to operate without connection to the headend." See column 19, lines 31-32. While these portions of Amit indicate a desire to produce a design like the invention, as claimed, nevertheless, this portion of Amit also clearly illustrates that Amit does not provide an enabling teaching of "Home Networking" that can operate without connection to the headend. In *In re Kumar* 418 F.3d 1361 (Fed. Cir. 2005), the Federal Circuit clearly stated that to "**render a later invention unpatentable for**

obviousness, the prior art must enable a person of ordinary skill in the art to make and use the later invention.... Thus, the relevant inquiry is... whether [the earlier patent] enabled persons skilled in this art to produce" the later invention. By indicating that a system like the claimed invention would be "[n]ice to have", Amit has acknowledged that in fact Amit did not enable such a system.

Accordingly, neither of the references show or suggest an enabling teaching, or a likelihood of success of combination of Petler and Amit. The instant invention, on the other hand, provides a detailed and enabling description of the invention. See, e.g., FIGs. 2-11 of the present application and the corresponding specification.

It follows that Petler cannot be combined with Amit to form a device (or provide a method) as claimed in independent claims 71, 82, and 96 at least because Petler teaches away from such a combination, Amit would require a redesign to implement the combination, and there is no reasonable expectation of success of the combination. Specifically, it would be improper to incorporate the discussion of Petler into the in-home coaxial network discussed in Amit because Petler teaches away from such a network, Amit teaches administering bandwidth assignment from the headend, and Amit acknowledges that it has not set forth an enabling disclosure of a system that operates according to the claimed invention without connection to the headend. Thus, a master module, as claimed, that establishes an order of transmission opportunities for the network modules to follow when transmitting bursts to other network modules is not shown or suggested by Petler and Amit, whether taken together or separately.

Furthermore, it is illogical to consider modifying either Petler or Amit to provide bandwidth allocation within the home because both of these references specify that bandwidth assignment be provided to the in-home network from the cable headend. A skilled person starting with either Petler or Amit would already have a system in which the bandwidth assignment had been solved -- at the headend. There would be no reason to modify either Petler or Amit because the bandwidth assignment issue did not require a solution.

Reply to Rejections under 35 U.S.C. § 103
as Unpatentable from Bushmitch in view of Amit

Bushmitch is directed to a system that requires that all transmitted data packets pass through a system controller, stating, in pertinent part, "[t]he network includes an operably linked system controller for receiving upstream channel packets and originating downstream channel packets." See, Bushmitch, Abstract. The system controller is defined at column 3, lines 35-36, as a cable modem termination system (CMTS). The CMTS is located at the headend. See Bushmitch, column 1, lines 17-18. Thus, Bushmitch requires that all upstream channel packets are directed to the system controller which is resident at the cable headend, distant from the home. Thereafter, the system controller originates downstream packets back to a location within the home. Accordingly, Bushmitch discusses a system similar to the Petler system described above.

With respect to the rejection based on Bushmitch in view of Amit, applicants respectfully submit that Bushmitch cannot be combined with Amit to reject claims 71-89 and 96-106 as obvious.

Applicants respectfully submit that Amit, as stated above, requires a redesign and reconstruction to implement the system of the invention, as claimed, because Amit states that "each home device addresses the headend, and the headend assigns the carrier frequency and bandwidth to each home network. . . ." See, column 4, lines 9-14. Bushmitch, like Petler, discusses an in-home network that receives bandwidth assignment from a distant headend and not from within the home network itself. It follows that Bushmitch cannot be combined with Amit to form a device (or provide a method) as claimed in independent claims 71, 82, and 96 because Amit has to be redesigned to form such a combination. Specifically, it would be improper to incorporate the discussion of Bushmitch into the in-home coaxial network discussed in Amit because Amit discusses administering bandwidth assignment to the home network from the headend.

In addition, similar to the reasoning set forth above with respect to the combination of Petler and Amit, neither Bushmitch nor Amit show or suggest an enabling teaching, or a likelihood of success of combination of Petler and Amit. The instant invention, on the other hand, provides a detailed and enabling description of the invention. See, e.g., FIGs. 2-11 of the present application and the corresponding specification.

Furthermore, it is illogical to consider modifying either Bushmitch or Amit to provide bandwidth allocation within the home because both of these references specify that bandwidth assignment should be provided to the in-home network from the cable headend. A skilled person starting with either Bushmitch or Amit would already have a system in which the bandwidth assignment had been solved -- at the headend. There would be no reason to modify either Bushmitch or Amit because the bandwidth assignment issue did not require a solution.

Reply to Rejections of Claims 72, 77, 83, 87, 97, and 102

The Examiner has acknowledged that the subject matter of claims 72, 77, 83, 87, 97, and 102 is neither shown nor suggested by either the combination of Petler and Amit, the combination of Bushmitch and Amit, or any of these references taken alone. Nevertheless, the Examiner has taken official notice that claims 72, 77, 83, 87, 97, and 102 are obvious in view of each of the combinations of Petler and Amit and Bushmitch and Amit, respectively.

Applicants have already pointed out in the reply to Office Action filed April 3, 2008 that the Official Notice taken with respect to claims 72, 77, 83, 87, 97, and 102 is improper. Applicants quote below the portion of the April 3, 2008 reply that addressed these points.

Specifically, with respect to claims 72 and 83, the Examiner has taken official notice that "a method and system for assigning at least one of time slot to the cable modem based on the amount data ready for transmission in a cycle is well known and expected in the art at the time the invention was made." Applicants assert that the Official Notice is improper. The MPEP states that "[i]t is never appropriate to rely solely on 'common knowledge' in the art

without evidentiary support in the record, as the principal evidence upon which a rejection was based." MPEP 2144.03, citing *In re Zurko*, 258 F.3d 1379, 1385. Applicants demand that the Examiner produce such authority for such a statement and that such "assigning at least one of time slot to the cable modem" cited by the Examiner is related to the field of assigning time slots for signals being transmitted in a coax network in a home. Applicants assert that because the Official Notice is inappropriate, the rejection of claims 72 and 83 is improper and that, for at least this reason, the rejection under 35 U.S.C. § 103 of claims 72 and 83 should be withdrawn.

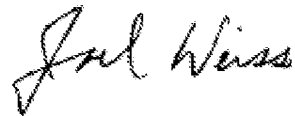
With respect to claims 77 and 87, the Examiner has taken official notice that "a method and system for transmitting a null packet when it has no data to transmit is well-known and expected in the art at the time of invention was made." Applicants assert that the Official Notice is improper, based on MPEP 2144.03, as cited above. Applicants demand that the Examiner produce such authority for such a statement and that such transmitting is related to the field of transmitting signals via the coax network in a home. Applicants assert that because the Official Notice is inappropriate, the rejection of claims 77 and 87 is improper and that, for at least this reason, the rejections of claims 77 and 87 under 35 U.S.C. § 103 should be withdrawn.

Applicants reiterate the previously-stated points and urge that the Examiner either provide the requested authority or withdraw the rejection of claims 72, 77, 83, 87, 97, and 102.

Conclusion

In conclusion, each of the independent claims 71, 82, and 96 are not shown or suggested by the cited prior art. Because each of the independent claims are not shown or suggested by the prior art, each of the dependent claims, which depend directly therefrom, are allowable as well. Applicants respectfully request the allowance of claims 71-89 and 96-106. Applicants respectfully anticipate a prompt and positive response.

Respectfully submitted,

A handwritten signature in black ink that reads "Joel Weiss". The signature is written in a cursive, flowing style.

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